

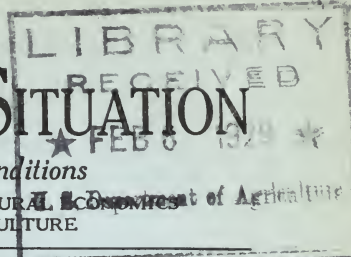
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THE AGRICULTURAL SITUATION

A Brief Summary of Economic Conditions

ISSUED MONTHLY BY THE BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE



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MORE SHEEP—FEWER HOGS—FAVORABLE LIVESTOCK PROSPECTS

The annual inventory of the Nation's livestock made as of January 1 indicates fewer hogs on hand than last year, more sheep, and about the same number of cattle.

The number of horses continues to decline as it has for several years. It is now at the lowest point in 40 years and judging by the number of colts born in 1928 will continue to decline. Horse prices are advancing. This appears to be an excellent time for many farmers to replace old or worn-out horses with young animals.

The number of dairy cows is reported as about the same as a year ago but yearling heifers and heifer calves showed some increase in numbers.

The outlook for the swine industry in 1929 is favorable. The 1929 market supply of hogs is expected to be considerably smaller than that of 1928. Some improvement in the foreign demand for American pork products is indicated and no material change in domestic demand is anticipated. Hog prices during 1929 are expected to average considerably higher than in 1928.

The combined spring and fall pig crop of 1928, as indicated by the pig surveys, was about 5 per cent smaller for the Corn Belt than the crop of 1927. The distribution of the 1928 crop over the Corn Belt States was in better relation to corn supplies than that of the 1927 crop.

Information as to hog supplies for the marketing year, November, 1928, to October, 1929, indicates a slaughter of from 43,000,000 to 45,000,000 head, which compares with a slaughter of 48,000,000 for the crop year 1927-28.

The immediate outlook for the cattle industry continues favorable, with prices about at the peak of the cycle. Further reduction in market supplies in 1929 is indicated, but the decrease probably will not be as great as that of 1928. Supplies of grain-finished cattle during the first half of 1929 will probably equal or exceed those in the first half of last year. Any increase in such cattle, however, is likely to be offset by decreased supplies of other kinds of slaughter cattle. In the past price situations like the one which now prevails have been followed by increased production and reduced prices. This, therefore, does not appear to be a favorable time for new producers to enter the industry. Those already in may profit by moderate expansion during the next two or three years even though prices go somewhat lower.

Supplies of lambs for marketing in the first half of 1929 are slightly larger than a year earlier, and indications are that a larger proportion of western fed lambs will be marketed after March 1 than last year. Sheep numbers continued to increase during 1928, and the lamb crop this year may show some increase above last year. Wool production in the United States and in the important foreign producing countries during the 1928-29 season will apparently be about 6 per cent larger than for the 1927-28 season, and stocks in the primary markets have been increased.

The Agricultural Outlook Report for 1929 is available in printed form upon request.

TREND OF LIVESTOCK PRODUCTION

The following shows the number of farm animals in the United States according to the estimate made as of January 1 each year. (Issued January 25, 1929, by Crop Reporting Board.)

[Figures given in terms of thousands, last three ciphers being omitted]

	1922	1923	1924	1925	1926	1927	1928	1929
Horses-----	18, 546	17, 943	17, 222	16, 489	15, 830	15, 133	14, 540	14, 029
Mules-----	5, 626	5, 696	5, 720	5, 725	5, 739	5, 652	5, 532	5, 447
All cattle-----	67, 264	66, 156	64, 507	61, 996	59, 122	56, 832	55, 681	55, 751
Milk cows ¹ -----	21, 665	21, 840	22, 161	22, 481	22, 188	21, 801	21, 824	21, 820
Swine-----	58, 100	68, 189	64, 950	55, 568	52, 148	54, 788	60, 420	54, 956
Sheep-----	36, 329	37, 223	38, 300	38, 112	39, 730	41, 881	44, 554	47, 171

¹ Cows and heifers 2 years and over kept for milk.

Decreased numbers of hogs, horses, and mules, increased numbers of sheep, and about the same number of cattle on January 1, 1929, compared to a year ago, are shown by the annual estimate of livestock numbers on farms. Milk cows and heifers are included in the estimates for all cattle. Reports indicate that some farmers in those areas where cattle of dual purpose of beef types predominate are tending to shift from milk production back to beef production. For the country as a whole, cows and heifers 2 years old and over kept for milk are estimated at 21,820,000 head compared with 21,824,000 head a year ago. Yearling heifers kept for milk cows, however, show an increase from 4,201,000 head a year ago to 4,377,000 head on January 1, 1929. Heifer calves intended for milk cows also increased as compared with a year earlier.

Combining all livestock numbers in units which allow for differences in size and feed requirements of the several species, the composite number on January 1929 was 1.6 per cent below January 1, 1928. This decline in the composite numbers is a continuation of the decline which began in about 1918. The present figure is 16.4 per cent below the figure for January 1, 1920.

The total value of all livestock on January 1, 1929, was \$5,953,000,000 compared to \$5,513,000,000 January 1, 1928. The 1929 valuation is the largest since 1921. The increased value this year, amounting to 8 per cent over 1928, was due principally to the further marked increase in the value per head of cattle. Prices per head of all species except hogs are higher than a year ago.

GENERAL BUSINESS INDICATORS RELATED TO AGRICULTURE

	Decem- ber, 1927	Novem- ber, 1928	Decem- ber, 1928	Month's trend
PRODUCTION				
Pig iron, daily (thousand tons).....	87	¹ 110	109	Decrease.
Bituminous coal (million tons).....	41	46	43	Do.
Steel ingots (thousand long tons).....	3, 176	4, 259	4, 015	Do.
CONSUMPTION				
Cotton, by mills (thousand bales).....	639	611	534	Decrease.
Unfilled orders, steel corpora- tion (thousand tons).....	3, 973	3, 673	3, 977	Increase.
Building contracts in 27 North- eastern States (million dollars).....	415	422	382	Decrease.
Hogs slaughtered (thousands).....	2, 747	2, 602	3, 230	Increase.
Cattle slaughtered (thousands).....	980	1, 038	910	Decrease.
Sheep slaughtered (thousands).....	896	1, 016	917	Do.
MOVEMENTS				
Bank clearings (New York) (billion dollars).....	28	36	39	Increase.
Carloadings (thousands).....	¹ 4, 175	4, 245	4, 414	Do.
Mail-order sales (million dollars).....	59	62	74	Do.
Employees, New York State factories (thousands).....	467	475	472	Decrease.
Average price 25 industrial stocks (dollars).....	242	316	287	Do.
Interest rate (4-6 months' paper, New York) (per cent).....	4. 00	5. 38	5. 37	Do.
Retail food price index (De- partment of Labor) ²	156	157	156	Do.
Wholesale price index (Depart- ment of Labor) ³	97	97	97	Unchanged.

¹ Revised.² 1913=100.³ 1926=100.

Data on this page, excepting livestock slaughter and price indexes, are from the Survey of Current Business, Bureau of the Census, United States Department of Commerce.

GENERAL TREND OF PRICES AND WAGES

[1910-1914=100]

Year and month	Whole-sale prices of all commodities ¹	Industrial wages ²	Prices paid by farmers for commodities used in—			Farm wages	Taxes ³
			Living	Pro-duction	Living production		
1910.....	103	-----	98	98	98	97	-----
1911.....	95	-----	100	103	101	97	-----
1912.....	101	-----	101	98	100	101	-----
1913.....	102	-----	100	102	100	104	-----
1914.....	100	-----	102	99	101	101	100
1915.....	103	101	107	103	106	102	102
1916.....	129	114	125	121	123	112	104
1917.....	180	129	148	152	150	140	106
1918.....	198	160	180	176	178	176	118
1919.....	210	185	214	192	205	206	130
1920.....	230	222	227	175	206	239	155
1921.....	150	203	165	142	156	150	217
1922.....	152	197	160	140	152	146	232
1923.....	156	214	161	142	153	166	246
1924.....	152	218	162	143	154	166	249
1925.....	162	223	165	149	159	168	250
1926.....	154	229	164	144	156	171	253
1927.....	149	231	161	144	154	170	-----
December—							
1921.....	142	196	-----	-----	-----	-----	-----
1922.....	159	208	-----	-----	-----	-----	-----
1923.....	154	220	-----	-----	-----	-----	-----
1924.....	160	222	-----	-----	-----	-----	-----
1925.....	159	229	-----	-----	-----	-----	-----
1926.....	150	232	163	143	155	-----	-----
1927.....	152	233	161	142	153	-----	-----
1928							
January.....	151	230	-----	-----	-----	161	-----
February.....	151	230	-----	-----	-----	-----	-----
March.....	150	233	162	145	155	-----	-----
April.....	152	227	-----	-----	-----	166	-----
May.....	154	230	-----	-----	-----	-----	-----
June.....	153	232	162	148	156	-----	-----
July.....	154	230	-----	-----	-----	170	-----
August.....	155	231	-----	-----	-----	-----	-----
September.....	157	234	-----	-----	-----	-----	-----
October.....	153	234	-----	-----	-----	175	-----
November.....	151	233	-----	-----	-----	-----	-----
December.....	151	237	-----	-----	-----	-----	-----

¹ Bureau of Labor Statistics. Index for 1928 obtained by multiplying new series by 156.6.² Average weekly earnings, New York State factories. June, 1914=100.³ Index of estimate of total taxes paid on all farm property. 1914=100.

GENERAL TREND OF PRICES AND PURCHASING POWER

[On 5-year base; August, 1909–July, 1914=100]

Year and month	Index numbers of farm prices							Prices paid by farmers for commodities bought ¹	Ratio of prices received to prices paid
	Grains	Fruits and vegetables	Meat animals	Dairy products	Poultry products	Cotton and cottonseed	All groups, 30 items		
1910.....	104	91	103	100	104	113	103	98	106
1911.....	96	106	87	97	91	101	95	101	93
1912.....	106	110	95	103	101	87	99	100	99
1913.....	92	92	108	100	101	97	100	100	99
1914.....	103	100	112	100	105	85	102	101	101
1915.....	120	83	104	98	103	78	100	106	95
1916.....	126	123	120	102	116	119	117	123	95
1917.....	217	202	173	125	157	187	176	150	118
1918.....	226	162	202	152	185	245	200	178	112
1919.....	231	189	206	173	206	247	209	205	102
1920.....	231	249	173	188	222	248	205	206	99
1921.....	112	148	108	148	161	101	116	156	75
1922.....	105	152	113	134	139	156	124	152	81
1923.....	114	136	106	148	145	216	135	153	88
1924.....	129	124	109	134	147	211	134	154	87
1925.....	156	160	139	137	161	177	147	159	92
1926.....	129	189	146	136	156	122	136	156	87
1927.....	128	155	139	138	141	128	131	154	85
1928.....	130	146	150	140	150	152	139	-----	-----
December—									
1923.....	108	114	98	155	198	253	137	(154)	89
1924.....	155	110	113	137	217	176	139	(157)	89
1925.....	140	194	136	146	213	139	143	(157)	91
1926.....	120	137	140	144	212	81	127	155	82
1927.....	123	141	138	145	195	153	137	153	90
1928.....									
January.....	125	144	138	145	177	152	137	(154)	89
February.....	128	153	139	145	144	141	135	(154)	87
March.....	136	174	139	142	122	147	137	155	89
April.....	144	179	142	139	121	154	140	(156)	90
May.....	160	181	151	136	128	166	148	(156)	95
June.....	152	168	150	134	127	162	145	157	92
July.....	142	156	157	134	134	170	145	² 157	² 93
August.....	120	137	162	135	140	153	139	² 157	² 89
September.....	117	127	174	141	156	142	141	² 157	² 90
October.....	116	114	160	143	168	147	137	² 157	² 88
November.....	110	109	150	144	185	146	134	² 157	² 86
December.....	112	108	143	146	197	148	134	² 157	² 85

¹ These index numbers are based on retail prices paid by farmers for commodities used in living and production, reported quarterly for March, June, September, and December. The indexes for other months are straight interpolations between the successive quarterly indexes.

² Preliminary.

SUMMARY OF DAIRY STATISTICS

[Million pounds, 000,000 omitted]

PRODUCTION

	December			January to December, inclusive		
	1928	1927	Per cent change	1928	1927	Per cent change
Creamery butter----	93	88	+4.9	1,479	1,496	-1.2
Farm butter-----	37	38	-2.4	590	600	-1.7
Total butter----	130	126	+2.7	2,069	2,096	-1.3
Cheese-----	25	23	+6.6	423	407	+3.9
Condensed and evaporated milk--	108	99	+8.9	1,833	1,856	-1.2
Total milk equivalent--	3,240	3,131	+3.5	52,262	52,742	-0.9

APPARENT CONSUMPTION

[Including production, changes in stocks, and net imports or exports]

Butter-----	166	163	+1.6	2,072	2,089	-0.8
Cheese-----	37	37	+0.6	479	491	-2.5
Condensed and evaporated milk--	117	132	-11.7	1,717	1,688	+1.7
Total milk equivalent--	4,152	4,130	-0.3	52,601	52,992	-0.7

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Division of Dairy and Poultry Products, B. A. E.

COLD STORAGE SITUATION

[January 1 holdings (shows nearest million; i. e., 000,000 omitted)]

Commodity	5-year average	Year ago	Month ago	Jan. 1, 1929
Apples-----barrels--	8	7	10	9
Creamery butter-----pounds--	46	46	71	44
American cheese-----do-----	52	48	74	68
Case eggs-----cases--	¹ 1,328	882	3,542	1,415
Total poultry-----pounds--	120	117	79	109
Total beef-----do-----	102	77	80	99
Total pork-----do-----	565	523	462	670
Lard-----do-----	52	55	67	85
Lamb and mutton, frozen -----pounds--	3	4	5	6
Total meats-----do-----	742	666	607	857

¹ 3 figures omitted.

THE OUTLOOK FOR HOGS

The hog outlook for 1929 is favorable. Slaughter is expected to be considerably smaller than in 1928, with some improvement in foreign demand and no material change in domestic demand. The seasonal levels of hog prices in 1929 and 1930 are expected to average higher than in 1928. If higher hog prices this year stimulate increased hog breeding in late 1929, increased marketings in the winter of 1930-31 will again start the hog-price cycle downward. Stabilization of hog production at a level represented by the pig crop of 1928 appears to be the most suitable program for securing a profitable balance between corn and hog production in the Corn Belt.

The combined spring and fall pig crop of 1928, as indicated by the pig surveys, was about 5 per cent smaller for the Corn Belt and 6.5 per cent smaller for the United States than the crop of 1927. Distribution of the 1928 crop over the Corn Belt States was in better relation to corn supplies than that of the 1927 crop, since a larger-than-usual proportion of the latter crop was produced in the Corn Belt States east of the Mississippi River where corn production was much below normal in 1927.

Estimated number of hogs on farms on January 1, 1929 was 54,956,000 head compared with the revised estimate of 60,420,000 on January 1, 1928.

Information as to hog supplies for the marketing-year, November, 1928, to October, 1929, indicates a slaughter of 44,000,000 to 46,000,000 head, which compares with a slaughter of 48,100,000 for the crop year 1927-28, 43,100,000 for 1926-27 and 40,800,000 for 1925-26. The decrease for this crop year from that of 1927-28 is thus indicated as from 2,000,000 to 4,000,000 head. Slaughter in November and December of the present crop year was about 1,680,000 head larger than for these two months a year ago. The supply of hogs for the remaining 10 months of this crop year, January to October, inclusive, is thus indicated as from 3,500,000 to 5,500,000 head smaller than for the same months in 1928. The greater part of this decrease is expected to occur during the period February to June. The indicated decrease in prospective slaughter supplies is partially offset by an increase in storage supplies of pork and lard on January 1 over a year ago of 176,000,000 pounds, which is equivalent to about 1,100,000 hogs.

These estimates of slaughter supplies are based upon (1) the 1928 pig surveys, which indicated a decrease in the total pig crop of the Corn Belt in 1928 at about 3,200,000 head and of the United States at about 5,400,000 head as compared with 1927; (2) the relationship of the slaughter in November-December 1928, to total winter slaughter; (3) the probable proportion of winter slaughter to slaughter for the crop year, and (4) the estimated number of hogs on farms January 1, 1929 compared with the numbers on January 1, 1928 and 1927.

The indicated reduction in the 1928 fall pig crop in the Corn Belt as compared with the fall crop of 1927, together with an indicated reduction in the number of sows to farrow next spring, points to slaughter supplies next summer and fall slightly smaller than in the corresponding seasons of 1928. Distribution of marketings during this period is expected to be more even than in 1928. Last summer the scarcity and high price of corn apparently caused many producers to

carry on grass, hogs which ordinarily would have been marketed earlier. When new crop corn became available these hogs were finished out as quickly as possible, resulting in a larger-than-usual proportion of old-crop hogs in late September, October, and early November marketings.

December reports on the number of sows bred, or to be bred for, spring farrow in 1929, point to a decrease in the spring pig crop, assuming a relationship between breeding intentions and actual farrowings similar to that of other years. For the Corn Belt this reduction is indicated as from 4 to 9 per cent. If such a reduction takes place the supply of hogs for the winter of 1929-30 will be less than for this winter.

Present supplies of corn in the Corn Belt are normally distributed and no unusual movement of corn from surplus to deficit areas, such as occurred last year, is to be expected. The corn-hog ratio of 12 in Iowa on December 15 was somewhat more favorable to hog feeding than a year ago, when it was 10.5. Since no material change in corn acreage in 1929 can be foreseen at present, an average yield per acre would insure a supply of corn for feeding next fall and winter larger in proportion to feeding requirements than this winter, if hog production is curtailed to the extent now indicated.

Factors affecting the foreign demand for American pork products have a more favorable aspect for the 1928-29 season than a year ago. The outstanding points are: (1) Fewer hogs in Europe, as indicated by reduced numbers of breeding sows and smaller current marketings; (2) a feed supply in Europe no larger than the relatively small supply of last year, and higher prices for some imported foods, all of which tends to discourage increased breeding; (3) a European price level for hogs and hog products other than lard, substantially above last year; these increases over last year to date being relatively larger than the increases in the United States, and (4) somewhat improved buying power on the Continent, and no decrease probable in Great Britain.

These favorable factors may be expected to result in an increase in export demand for American pork and lard during 1928-29 as against 1927-28. In Great Britain, the leading foreign market for American pork products, the indicated reduced supplies of cured pork from the Continent should place the American products in a better competitive position. The British demand for lard during recent years has fluctuated within relatively narrow limits, and the total quantities of lard taken in 1929 should be no smaller than the imports in 1928 unless American lard prices advance markedly above last year.

In Germany, the outlook is for a season of higher pork prices as compared with last year. With conditions in neighboring countries substantially the same as those prevailing in Germany, that country should offer a better outlet this year than last for American hog products, especially for lard. Since livestock production plans in Europe, especially on the Continent, are designed to meet domestic requirements so far as possible production plans in America should take into consideration that the European outlet for American hog products can not be expected to equal average exports since the war.

Hog prices apparently reached the low point of the winter season the week ending December 15, when the average at Chicago was \$8.50. Prices subsequently moved gradually until the fourth week in January when a sharp advance carried the average to approximately \$9.50, or about \$1.35 higher than a year ago.

On the basis of indicated supply and demand conditions hog prices are expected to continue the seasonal advance now in progress until the peak of the spring rise is reached some time in March or early in April. This probably will be followed by a normal seasonal decline which usually comes in May and June, when the bulk of the fall pig crop of the previous year is marketed.

Supplies of hog prices in storage on July 1, 1929, are expected to be considerably less than those on July 1, 1928, and hog supplies next summer are expected to be less than last summer; demand for pork both at home and abroad is likely to show a slight improvement over the demand in the summer of 1928; and hog prices will probably average higher than last summer. The level of hog prices during the winter of 1929-30 is expected to average higher than that prevailing this winter.

Inspected slaughter of hogs in the crop year 1927-28 totaled 48,100,000 head and was the third largest on record, being 8,000,000 head or 18 per cent larger than that of 1925-26 and 5,000,000 larger than that of 1926-27. Market value of the 1927-28 inspected slaughter was 15 per cent less than the \$1,195,000,000 paid for hogs slaughtered in 1925-26. Slaughter in 1925-26 was the smallest in seven years and total market value was the largest. Average price per 100 pounds was \$9.20 in 1927-28 and \$12.37 in 1925-26.

Market supplies of hogs equal to those of the past year can only be expected to result in a comparatively low level of hog prices. If Corn Belt production policy is to be a continuation of the present high corn and feed crop acreage with varying yearly production from that acreage, the determining factor in hog production, then wide fluctuations in both hog supplies and hog prices are to be expected. Hog supplies for 1929, as indicated, seem to be near the maximum for which a fairly high level of prices can be secured and near the minimum to be expected from present corn production. Stabilization of supplies at about that level seems to offer the best present prospects for joint corn-hog returns in the Corn Belt.

SUMMARY OF THE YEAR PAST IN VARIOUS STATES

[Reports from State representatives of the Division of Crop and Livestock
Estimates of this bureau]

IOWA

The year 1928 has resulted, like many other years, in success for some and failures for others. In general, the ledger will carry red-ink balances for small groups of individuals rather than for large areas as experienced in some recent years. When the livestock and grain items have been given their proper relative values and the net result determined, a strengthening of our reserves will be shown. Favorable price influences have raised some items to higher levels, while unsatisfactory price conditions for other items have only produced a modification in what might have been a very encouraging history of progress. The income from hogs, potatoes, and some small grains has been relatively low, outweighed, on the other hand, by profitable operations in the cattle, sheep, and wool items. Dairying continued on a

fairly rapid increase during the year but the cow-testing associations, cooperative creameries, dairy extension interests, and other factors have all served to build confidence in the expansion through attention to efficient methods. Poultry has supported a favorable balance in our income calculations for the year. Egg and poultry prices have been favorable except for short seasons in the spring and summer.

The value of crop production in Iowa in 1928 was about 10.2 per cent greater than in the previous year, and the total valuation estimated at \$574,376,000 is the greatest since 1920. The corn crop of 476,012,000 bushels was 89,000,000 bushels more than harvested in 1927, and ranks as the second largest corn crop of the State. The acreage in 1928 was 2.5 per cent larger than in 1927. Conditions in the spring were almost ideal for planting, and favorable rains, temperature, and cultivating conditions helped to produce a very uniform stand of stalks. Disappointment in yields, however, developed, and the crop, instead of continuing according to early summer indications for the highest crop ever produced, was estimated at harvest on the basis of an average yield rating second in the corn crops of the State.

The gross farm income for Iowa for 1928 will probably equal that of the year previous. The loss sustained by the hog industry through the lower price level for the year is balanced partly by favorable prices for other livestock and dairy and poultry products. Should selling prices in 1929 for the 1928 corn crop take an upward shift and the price trend for hogs finished with this year's corn crop likewise make an improvement, the present outlook would be strengthened. The cattle feeders have shown a fair profit for the industry quite generally throughout the western half of the State. Feed supplies in this region were plentiful during the fore part of the year, whereas in the eastern half summer feeding was very much reduced because of a shortage of old corn. Those who operated were forced to purchase corn at a price which sheared off a large percentage of the usual profits.

Some feeders who bought stocker and feeding cattle in the fall of 1927, which were largely calves and lightweight steers, have grassed this stock through this season and are marketing them off of the 1928 corn crop. This group will show a relatively larger income than will the group who bought feeder supplies at the advanced prices of the present season. Cattle feeding this winter stands about 15 per cent or more above the feeding situation of last winter, but we are nearly 15 per cent below the volume of feeding for the average of the past five years as indicated by July to December receipts of stocker and feeder cattle.

With about 12 per cent more corn this winter than usual, a few farmers who store corn will face the situation of financing themselves until an advantageous time for selling. The Iowa warehouse law provides for placing the corn as security on a loan until the corn is finally sold, and some country bankers are assisting their patrons through the provisions of this law. Inquiries as to the application of these provisions have been more numerous than in previous years, but the costs of sealing stored corn and other attendant costs make local loans with chattel mortgages as security more favorable to most farmers, and no actual increase is expected in the numbers of farmers using these services.

The tuberculosis-eradication program in the cattle herds of Iowa is recorded with numerous victories this season. Injunction proceedings against testing which delayed the work in a number of important

cattle-producing counties have been dissolved in all counties except one. Counties now actively engaged under the area plan of testing number 69, of which 44 have met the requirements as modified counties. The percentage of reacting cattle in 1928 is 1.58 per cent of the number tested, while a year ago 2.64 per cent were reactors. Favorable support and influence from counties which have experienced a reduction in numbers of reacting cattle is spreading rapidly over the State, aiding further progress in clearing the State of this bovine disease.

The market for farm lands continued inactive during the year, purchases being relatively few and largely the acquirement of farms for family operations. A few scattering farms reverted to former owners through loss of title by default, but a stronger feeling of security has been evidenced in all sections than has been felt since the depression. Although Iowa land values showed a slight decline from March 1, 1927, to March 1, 1928, the year just closing has had a tone for the better and different, financial organizations interested in the local situation are more optimistic than a year ago.

LESLIE M. CARL.

MINNESOTA

The 1928 crop season in Minnesota on the whole was favorable for seeding, growing, and harvesting of the major crops. It is true that there were times when conditions appeared rather gloomy. The spring was somewhat cold and backward which was discouraging but favorable weather later in the season gave a brighter aspect to the outlook. Small grains filled well and corn at this time, though backward, was making good progress.

Harvest and threshing of small grains progressed under favorable weather conditions. Corn prospects at this period were not any too assuring, but a long warm fall with no frost matured an excellent crop. Potatoes yielded above expectations while flax fell below earlier expectations.

After harvest the most important question both to agriculture and other lines of industry is the gross farm value of the 1928 crop and comparisons with other years. The combined gross farm value of the nine principal crops—corn, winter wheat, spring wheat, oats, barley, rye, flax, potatoes, and tame hay—based on the farm price December 1, indicated a return of \$272,095,000 compared with \$265,142,000 for the same crops in 1927. This indicates the gross farm value of the nine crops to be \$6,953,000 in excess of one year ago. However, if we add the gross farm value of buckwheat, drybeans, and wild hay the total for 1928 would be \$286,985,000 and for 1927 the total would be \$284,080,000 or an increase for 1928 over 1927 of only about \$3,000,000. Compared with the 5-year (1922–1926) average, the farm value of the nine crops unfortunately is \$8,180,000 less for 1928 than for the 5-year average.

The commercial potato sections of Minnesota suffered a heavy loss this year. Too many acres were planted, too large a yield, and the seven deficient States to the south and east of Minnesota had such a heavy production that they were not in the market for Minnesota potatoes. All this was most depressing and it had the effect of decreasing the farm value from \$19,877,000 in 1927 to \$11,682,000 in 1928.

Minnesota is also one of the three leading dairy States. With the price of butterfat on the whole above last year, the prospects are that the farm value of milk produced will exceed that of 1927 by a comfortable margin.

Egg production, likewise, will, in terms of dollars, exceed that of 1927.

At the present time there is not enough material at hand to determine whether the gross farm value of livestock marketed will exceed that of one year ago. Had hog prices not dropped it is quite probable that the value of livestock would have exceeded one year ago.

Considering crops, dairy products, eggs, and livestock marketed this year it perhaps is safe to say that the farm value will at least equal or possibly exceed that of one year ago.

P. H. KIRK.

SOUTH DAKOTA

The year of 1928 has been a much less profitable one for South Dakota farmers than was 1927. Composite yield of crops this year was about 26 per cent below last year and 16 per cent below the 10-year average. Based upon December 1 prices, the value per unit of practically all the important crops shows a decline from last year. The value of 11 principal crops, based upon the same prices, was \$148,344,000 as compared to \$207,127,000 in 1927 and \$103,522,000 in 1926.

At the beginning of the planting season in 1928, conditions appeared favorable for a good crop year. There was a good supply of soil moisture and seasonable weather prevailed at first. Then a spring drought occurred, lasting through most of April, May, and the first 10 days of June. This was sufficient to prevent wheat from stooling out properly and materially decreased the prospects for all small grains and hay crops. Sowing of flax was delayed because the ground was too dry for breaking, and corn planting was held up in the northern section of the State.

After this drought was broken, there followed nearly two months of very favorable weather. Corn and flax were making good progress and yields above average were expected. However, a series of hot days, accompanied with hot winds and lack of moisture, occurred in the early part of August, severely reducing prospects for these crops, and the final yields were considerably below average.

Weather during the fall months of the year has been such as to permit an unusually large amount of fall plowing to be done.

South Dakota's income from sales of livestock during 1928 was about 23 per cent greater than last year, based upon receipts of livestock from the State at stockyards and markets and average farm prices. Market receipts of cattle and calves during the first 11 months of 1928 were about 4 per cent above the corresponding period of the previous year, while average prices were above last year by about one-third. In the case of hogs, a 29 per cent increase in marketing was accompanied with a 15 per cent decrease in price. About 15 per cent more sheep and lambs were marketed this year than last and the average price was about 5 per cent greater.

The fall pig crop, according to the December pig survey, was 9.6 per cent below last year. Sows bred or to be bred for spring farrowing in 1929 were reported at 102.7 per cent of the number farrowing the

spring of 1928, which, judging from the relation shown between intentions and actual farrowings in past years, indicates a decrease of about 10 per cent in farrowing next spring. The greatest decreases are reported in areas where the corn crop was short this year and especially in the central and south central crop reporting districts and the western half of the southeastern district.

JOSEPH L. ORR.

WISCONSIN

The farm picture in Wisconsin for 1928 shows a number of changes from the previous year. Feed crops with exception of tame hay, show increases in production—the corn situation being especially good—and oats production is higher than a year ago by about 16 per cent and barley by 13 per cent. These crops offset to a considerable extent the reduced hay production and will probably result in a smaller outlay for feed than usual.

Since over half of the Wisconsin farm income is derived from milk on the farm, the price of milk becomes the most important item in determining the agricultural situation in this State. Up to October, Wisconsin milk prices during 1928 were above any year since 1920. During October and November, however, prices did not advance as in previous years; in fact, they fell below the prices of the same months last year. Butter and cheese prices likewise have been slightly less firm in recent months than a year ago, which is an important factor in the Wisconsin milk price, for in 1928 36 per cent of Wisconsin's farms furnished milk to creameries and 30 per cent to cheese factories. Cheese and butter prices, therefore, affect directly the income of about two-thirds of the farms in the State.

Assuming no marked change in the price of milk during December, which is not as yet available, it now appears that the average milk price in Wisconsin for 1928 will be about \$2.15 per hundredweight as compared to \$2.11 a year ago and \$1.92 in 1926. Pastures were somewhat less favorable in 1928 than in 1927, and with only a small increase in the average price of milk no very marked change in the farm income from this source is probable. Hog prices have not been very satisfactory during the past year and this is the second largest item of income. The latter is of course partly offset by the more favorable cattle prices.

Only about 14 per cent of the farm income in the State is derived from cash crops, of which potatoes are the most important. With the potato situation as adverse as it has been for the 1928 crop, the income from this source will be considerably reduced in spite of the much larger production. Substantial increases are recorded in the value of canning peas and tobacco as well as a number of minor crops, but these probably will not offset the loss in potatoes. All in all, there is probably no marked change in the livestock industries when taken as a whole, while the cash crops will probably show a less satisfactory total because of the poor potato returns.

Weather conditions were favorable for farm work at planting time, but the spring drought prevented recovery of hay and winter grains, which had already suffered heavily. Wet weather at harvest time reduced the quality of much hay and grain. The fall was fairly favorable and new seedings were in good shape when the ground was frozen.

WALTER H. EBLING.

COLORADO

Up until the middle of July prospects were for record crops throughout Colorado, but a drought occurred covering most of the eastern dry-land country that lasted until September in many sections. This drought was especially damaging to small grains and beans and it also prevented the planting of thousands of acres of winter wheat this fall.

A controversy between the sugar companies and the beet growers caused a reduction in the beet acreage this year and, unfortunately, much of the former beet land was planted to potatoes.

The reduction in the beet acreage along with a smaller alfalfa crop, due to disease, will prevent the feeding of the usual number of lambs and cattle in northern Colorado this year and this will affect the agricultural income adversely.

While production of most crops was about normal this year, prices were generally lower and the value of crops produced was some \$5,000,000 less than for 1927. Increased prices were received for several of the truck crops, notably cauliflower, celery, and onions. Apple prices showed improvement over last year and notably better prices were received for beans and hay. The one dark spot is the potato situation. An increased acreage was offset by a lower yield and production was below 1927, but prices have been too low to pay for shipping and although most of the crop was dug and stored, a large amount will not be shipped unless prices improve.

This decrease in crop value will be at least partially offset by the increased value of livestock marketed. With higher prices prevailing cattle marketings were some 6 per cent below 1927, while sheep marketings were about the same as last year, and hog marketing about 35 per cent larger.

Taken all together, the income from agriculture promises to be less than a year ago.

D. F. CHRISTY.

UTAH

With the exception of hay, alfalfa seed, and sugar beets, the crops of 1928 in Utah were larger than in 1927, and their gross value to the growers is estimated at \$42,000,000, or \$3,000,000 above the total value for 1927. The value of the hay crops this year was \$3,000,000 greater than that of last year, due altogether to higher prices. The other crops of the State, taken as a whole, just equaled in value their total of 1927.

The season was a dry one, with abnormally low rainfall during the growing season and a shortage of irrigation water in most of the State; but with the exception of sugar beets and alfalfa seed there was but little damage to crops from disease or insect pests. The dry season was most acute at a time when the small grains were not materially affected; in fact, their yields were relatively high. Good rains late in the spring gave the small grains a start which carried them through to harvest.

Wheat production amounted to 6,861,000 bushels in 1928, compared to 5,678,000 in 1927, the increase being partly due to an increase in acreage and partly to better yields. The three feed grains—oats, barley, and corn—together amounted to 4,065,000 bushels in 1927 and 4,663,000 in 1928. Barley production is increas-

ing at a rapid rate in Utah. The yields per acre in the "barley areas" of the State are exceptionally high, and the demand for this grain is greater than the supply. Stockmen still import corn from the Corn Belt States to supplement the home-grown feed grains of Utah.

The hay crop is the greatest in acreage and in value of any of the Utah crops. Its acreage in 1928 was 647,000 out of a total of 1,150,000 acres harvested for all crops, and its value this year was \$17,380,000. A scarcity of feed on the fall and winter grazing lands due to drought induced an unusually great demand for hay early in the fall, with a corresponding increase in prices.

The sugar-beet crop is smaller than last year, due partly to a decrease of 2,000 in the acreage harvested and partly to a lower yield than in 1927. There was some damage during the season from curly top disease, as there was in 1927. Alfalfa seed crops suffered disaster. Hot, dry weather early in the summer caused blooms to fall off, thus reducing the number of seed pods, and just before harvest time a killing frost further reduced the crop in the principal seed area. Prices, however, are much higher than in 1927, which partly offsets the loss in quantity of production.

The potato crop amounted to 3,312,000 bushels in 1928, compared to 2,970,000 in 1927, an increase of 242,000 bushels, whereas the value of this year's crop was only \$1,490,000, compared to \$2,228,000 in 1927, a decrease of \$738,000.

Commercial vegetables, including canning crops, are increasing in Utah at a fair rate from year to year. Seven of the chief of these crops amounted this year to \$2,165,000, compared to \$1,602,000 in 1927, and the six leading fruit crops of the State this year were worth to growers \$2,586,000, compared to \$2,508,000 in 1927. Of these fruits, cherries and peaches are increasing materially from year to year. Apples have not been profitable generally, but a number of the larger apple orchards have yielded good returns, due to "quantity production" and to proper care.

The present outlook for the season of 1929 is favorable. Snow is accumulating on various watersheds, thus promising irrigation water for the coming season. Fall grains are only fair to good in condition, but the present snow cover tends to improve that condition, so that a good yield of winter wheat and rye in 1929 is still possible in Utah.

FRANK ANDREWS.

NEVADA

Nevada's agricultural production in 1928 amounted to about \$9,600,000, compared to \$8,045,000 in 1927. Increases were general among the different crops, but hay increased the most. A shortage of feed on the fall and winter grazing lands stimulated the demand for hay, so that its price is considerably higher than a year ago; also the tonnage this year was greater than in 1927. This increase in tonnage is due chiefly to a fairly good yield of alfalfa this year, whereas in 1927 this kind of hay had an unfavorable season.

Grains are larger in quantity than last year, taking all kinds together, and there is some increase in their total value. The potato crop is about 7 per cent greater than in 1927, and its value also is greater, the average price being about the same as a year ago.

Fruits increased over the small yields of 1927, for they did not suffer so much from frost as they did last year. The commercial crops of cantaloupes amounted to about 4,000 crates more than in 1927, but their value increased this year to \$91,000, compared to \$76,000 in 1927.

The present outlook for Nevada agriculture is at least as favorable as at this time a year ago. Snows are accumulating on the various watersheds, thus storing up irrigation water for 1929.

FRANK ANDREWS.

ARIZONA

Arizona has enjoyed one of its most prosperous seasons during the year of 1928. Agricultural production was one of the outstanding factors in making this year the most significant of many consecutive years of progress. When the aggregate estimated value of 14 principal crops is compared with 1927, the close of the present season shows a 20 per cent increase. Although lack of summer rains was a restraining factor, satisfactory prices and steady demand leave the range livestock industry of the State in an easy position at this time.

The approaching end of the cotton-ginning season finds approximately 90 per cent of the forecast production ginned. Grades have held an exceptionally high average and prices have been profitable. A larger acreage and increased average yields give a value to the crop of the present year some \$3,000,000 in excess of that recorded for 1927.

Tame hay shows a slightly higher acre yield for 1928 and good prices have been offered throughout the entire season. Most of the season's hay crop has been disposed of, leaving a very small carry-over to be faced next season.

Truck crops and fruit acreages have shown marked increase when the season of 1928 is compared with earlier years. Market prices during the next few months will directly influence plantings of vegetables next season. Considering the amount of stock now available it is expected that citrus planting next spring will be the heaviest on record.

The general outlook for Arizona agriculture is very satisfactory at the present time. However, new problems will arise with the development of virgin agricultural lands. It is probable that during 1929 lands coming into cultivation for the first time will increase Arizona's agricultural area by about 200,000 acres.

This development in many respects constitutes Arizona's greatest opportunity for immediate growth in population as well as in agricultural production. Such highly specialized crops as citrus fruit, cantaloupes, lettuce, and Pima cotton will in some measure be represented in the production of these new projects. It is likely, however, that these new lands will turn mainly to seasonal, quick money field crops as represented by Upland cotton, grain sorghums, and winter grains.

Eventually these new lands will be given over to the growing of greater amounts of alfalfa. With this thought in mind it will be well for the established farmer to look to the increase of his dairy herds to be in a position to meet the demand which is likely to come in the near future for stock animals.

Cotton is expected in 1929 to retain its position as Arizona's principal crop. It is doubtful if the acreage will be increased on the

developed lands now growing cotton, although a slight increase may be expected in that of the Pima variety. Any increase in the total acreage over this year will be found on new lands. The exact amount of increase will be directly dependent upon the amount of water stored for irrigation by May 1.

From incomplete records of outmovement it is quite evident that heavy inroad has been made on Arizona stock cattle. The somewhat lightened ranges should show improved forage growth, thus increasing the feed supply of remaining stock. There has been little actual restocking although some producers are giving the idea some thought. Heavy outmovement of cattle can not be expected in the near future. Stock now remaining should go through an open winter in very good condition. Recent rains have brightened the prospect for spring feed. If warm days continue in central Arizona another month will bring an abundance of plant growth which is needed for sheep that are now wintering in that section.

M. R. WELLS.

OREGON

Revised estimates for 1927 and preliminary estimates for 1928 indicate a slightly higher value for the products of Oregon farms and ranges in 1928 than in 1927. While general field crops show somewhat less value than in 1927, fruits make a better showing, and increased values of livestock and livestock products make the 1928 total values slightly in excess of those of 1927.

Wheat: Very favorable growing conditions in 1927 served to produce the highest per acre yield of wheat in many years. But 1927 fall seeding conditions resulted in a less acreage for the 1928 crop, and a very dry growing season reduced the yield per acre of winter wheat about 2 bushels. 1928 wheat prices were materially lower than in 1927, so that the net result was a reduction in the value of the total wheat crop of nearly \$6,000,000.

Fruit: The outstanding feature of the 1928 fruit crop was the practical failure of the prune crop over most of the dried-prune territory. But the apple crop was much better than in 1927, and the total value of fruit crops in 1928 shows some increase over 1927.

Livestock: Cattle prices advanced about 25 per cent in 1928 over the 1927 year's average. While supplies were apparently about 5 per cent less, the improved prices made a nice gain in total cattle returns, and greatly encouraged the cattle men.

Sheep and lamb prices were very slightly higher than in 1927 but supplies were 12 to 15 per cent in excess of 1927.

Hog prices showed a marked decline in 1928 but supplies were enough larger to more than offset the decline in prices, so that the total 1928 hog revenues were in excess of 1927.

Manufactured dairy products (butter, cheese, and condensed milk) show some decrease as compared with 1927, but butterfat prices averaged about 9 per cent higher. It does not seem probable that there was any decrease in the direct consumption of milk and cream. Estimates of a substantial increase in total dairy values, therefore, seem warranted.

Egg prices averaged somewhat higher in 1928, and there was a large increase in turkey production.

The seeding of fall wheat for the 1929 crop was much delayed by the dry fall weather. Indications are that about 3 per cent more

acreage was seeded last fall than a year ago. Condition of the crop on December 1, 1928, was estimated at 85 per cent of normal compared with 98 per cent in 1927, and the 10-year average of 93 per cent. This situation would seem to indicate the probability of rather less Oregon wheat in 1929 than in 1928.

F. L. KENT.

ARKANSAS

There is little in the present agricultural situation in Arkansas to indicate change either for better or worse when compared to the situation a year ago. During the past year our farmers have harvested crops from $8\frac{1}{4}$ per cent more land than in 1927, with gross returns 6 per cent in excess of 1927. Expressed in another way, they have produced approximately \$11,000,000 more in gross values, but at a less net average return per acre for each cultivated acre. We may say then that for the year 1928 our farmers generally have merely marked time.

Our cotton growers have produced on-fifth more in quantity and one-eighth, or approximately \$13,000,000, more in value. A fair per cent of the growers have made some money. Our rice growers have also produced a slightly larger crop than a year ago. The margin of receipts over cost of production is slight with the great majority of rice growers.

Fruit growers, especially producers of apples, peaches, and grapes have had much better crops than in 1927. But peaches sold at a low figure and only a small per cent of growers realized profits. Some few apple growers made good profits, but there were many who suffered losses from freezes and from hail and other causes beyond their power to control. Grapes paid a slightly better profit than first reports indicated. Most other truck and fruit crops realized less than in 1927.

The survey of the livestock situation is now in progress, and results can only be surmised. From data thus far received, there has apparently been a decided slump in the swine business, an increase in the value of the dairy business of about 5 per cent, and a further increase in both quantity and value of the poultry business. At this time we can make no deductions concerning beef cattle and sheep.

Within the past year a few more banks have failed as a result of cumulative troubles following the deflation period of 1921 and 1922. In a general way, banks are not increasing farm loans, but are endeavoring to curtail the amounts loaned on farm lands. Short-time loans on chattels and personal security are comparatively in favor.

The joint stock land banks are making no farm loans. In the present state of the stock and bond markets, their bonds are not in demand and are not selling. The Federal land banks are making some farm loans. Interest rates from private and State banks on farm loans average close to 10 per cent. Implement dealers selling on time are securing themselves with notes bearing 10 per cent interest. In general the amounts realized from interest charges have probably more than offset losses accruing from failure to complete payments.

The most significant and perhaps most disquieting phase of our agricultural situation to-day is the increase of tenancy. In 1910 50 per cent of our farmers were tenants. In 1920, even after the profitable farming years of 1916 to 1920, the figure increased to 51 per cent. In 1925 it has risen to 57 per cent. To-day it is still higher.

Banks, insurance agencies, and loan companies have been forced to foreclose some mortgages. In most cases they have not been able to sell the farms so acquired to advantage, and hence have operated them by leases, usually to share croppers. It is doubtful if the peak of the movement toward tenancy has been reached. In some few counties, excessive levee, road, and other special taxes have caused actual abandonment of farms, which have then passed into tax-buyers' and speculators' hands. These also find it easier to lease than to sell to advantage. Of course the share crop system tends toward 1-crop farming, with its attendant evils.

Referring further to foreclosures on farms by banks and investment companies, it is a fact that the mortgagees in some cases found themselves worse off after foreclosing than before, in that they had the burden of paying taxes on the foreclosed properties. Also, in many instances the farms lay idle.

Late this year, owing to good returns from cotton in some sections where bank failures had occurred, in the process of realizing on the bank's assets, outright sales of farm lands have been made at prices much below the general level, but they have sold. An authentic instance is related of a 40-acre farm in southeast Arkansas selling about 10 years ago for \$2,000. Shortly after it sold again for \$2,500, then for \$3,000. Within the past month the original owner who sold it for \$2,000 has bought it back for \$800. On the other hand, there are indications of a tendency to buy farm lands in several counties in northeast Arkansas.

The general floods in the principal river valleys of the State in 1927 and 1928 have caused physical losses from which complete recovery may never be made. They have also caused some farm abandonment.

The eagerness with which the State leaped into road construction programs in 1922, 1923, and 1924 entailed heavy burdens on land-owners and in some ways hurt agricultural interests and values, especially by putting so much of the cost of construction against property adjoining the roads. Now the Martineau law has put the burden on the user of the roads, and has relieved farm lands of a yearly tax burden amounting to a sum between \$4,000,000 and \$5,000,000.

Improved roads have had a remarkable influence in extending the distance from shipping points at which truck, perishables, and poultry and dairy products may be successfully grown. They are also aiding in extending markets by making truck hauling to nonrailroad points and to nonjobbing points profitable, thus making a larger per cent of the farmers' products to be consumed nearer home, and tending to relieve congestion in central markets.

Marketing associations, especially in fruit-producing districts, are having hard work to keep out cutthroat competition among their various organizations. Inability to agree on uniform methods of selling and packing, with rivalries of different groups to make best showings, have led to rebating, excessive commissions, and increased salary lists to the detriment of the rank and file of the growers. The increased cost has not been successfully passed on to the consumer. This is the case in some of the larger producing districts. Most of the evils are curable, and are in process of eradication or adjustment, but they are a cause of irritation while they operate.

The State-wide cooperatives are also having their troubles, arising largely through competition with other economic or longer-organized systems.

In general, however, all the cooperatives are doing useful work in improving grading, handling, packing, and care of all the crops their members produce.

The farm labor situation is easy. Construction work in the cities has slackened somewhat and it is easier to secure tenants or day labor for the farm. Under these conditions, unless prices of farm products decline, usual or increased acreages in cash crops may be expected in 1929.

CHARLES S. BOUTON.

LOUISIANA

The three big money crops in this State are cotton, rice, and sugar cane, and, to a less degree, strawberries and truck. These will be discussed in order.

Cotton: The early planting season for cotton was unfavorable, there having been too much rain, which delayed planting and necessitated replanting two or three times in many sections. The ground was cold, wet, and soggy, especially in the poorly drained situations, and the earlier outlook was anything but favorable. Later on during the summer, dry hot weather set in, which was further aggravated by hot winds. As a result, the soil was very rapidly dried out. The surplus of moisture in the soil in the poorly drained lands early in the season prevented the proper development of the tap root of the plant. Later on the hot dry weather caused the ground to dry out thoroughly to a depth below the tap root in many sections, especially in the upland regions, and many plants died from lack of moisture. In many localities, also, a disease known as black root attacked the plants and brought about their untimely death.

In 1927 the delta land along the Mississippi River was flooded and the cotton crop destroyed. In 1928 the acreage came back strongly, being hindered to some extent, however, by a lack of funds for planting operations and a scarcity of seed in the territory flooded the preceding year. In other sections of the State an acreage increase compared with 1927 also occurred.

The Department of Agriculture on December 1 estimated the acreage planted and standing in this State on July 1, 1928, at 2,046,000 acres as against 1,585,000 acres in 1927. This is an increase of 29.1 per cent as compared with the previous year's acreage. The yield per acre, according to the December 1 estimate, is 165 pounds of lint cotton as against 170 pounds last year. Prices have been fairly satisfactory during the picking season, and a large per cent of the crop has already been disposed of by producers.

The extension service in various parts of the State has been testing out various kinds of fertilizer on special tracts, and in general there has been a tendency in this State toward improved varieties, the use of fertilizer in sufficient quantities, and the utilization of poison for boll weevils when necessary.

Cotton is still the big money crop in this State, and apparently it will continue to be the biggest for very many years to come.

Rice: The rice acreage this year declined somewhat as against last year, the acreage being 484,000 as against 500,000 last year. The

yield per acre, estimated at 38 bushels, is very good this season, due to favorable weather for harvesting and threshing, as was the case last year when the average yield per acre was 40 bushels and the production 20,000,000 bushels. Prices for rough rice, however, have been unsatisfactory, generally speaking, throughout the season. The total farm value of the rice crop this year in this State is estimated at \$16,553,000 as against \$17,400,000 last year.

Rice is grown principally in the treeless prairie district in southwest Louisiana on low-lying flat land with clay subsoil admirably adapted to the growing of rice. The rice millers in Louisiana are the principal buyers of Louisiana rough rice from the producers. Louisiana is the principal rice-producing State in the United States.

Sugar cane: The price per ton of cane which farmers have received for their cane this year has been low and unsatisfactory, due to the low price of sugar. This low price is partly made up by the heavier tonnage yield. It is thought that an increased use of fertilizer, deeper drainage, and heavier plantings per acre may materially increase the average yield per acre of the new varieties.

There were a number of sugar factories operating in 1928 which did not operate in 1927, and it is expected that in 1929 a number of factories idle for several years will operate. In fact, the increased acreage and heavier tonnage of cane to be ground for sugar will necessitate the operation of all Louisiana factories in the 1929 season.

Irish potatoes: Early Irish potatoes are raised commercially for shipment outside the State. The commercial acreage in 1928 was 21,800 acres against 21,860 acres in 1927. Production in 1928 was 1,526,000 bushels as against 1,421,000 bushels in 1927. Prices, however, in 1928 were lower than in the previous year, the total farm value of the crop being \$1,526,000 in 1928 as against \$2,401,000 in 1927.

Sweet potatoes: Sweet potatoes are also a money crop. The acreage in 1928 was less than in 1927 and the production 6,660,000 bushels as against 9,702,000 bushels in 1927. The farm value of the crop in 1928 was \$5,661,000 as compared with \$6,791,000 the previous year.

Strawberries: The strawberry crop was very good in 1928, as were prices for strawberries, and the returns were highly satisfactory to the farmers who produced them. The principal strawberry section is in Tangipahoa Parish north of Lake Pontchartrain. Most of the crop is handled in refrigerated cars over the I. C. Railroad for northern and eastern markets.

Louisiana strawberries are usually harvested in the latter part of April and in May, and are usually well off the market before the crops from competitive sections come in. For this reason, strawberries are a stable crop in this State. The farm value of the crop in 1928 was \$7,609,000 as against a value of \$3,844,000 in 1927. The acreage in 1928 was 23,200 acres compared with 21,100 acres in 1927.

Other truck crops: Louisiana ships a large quantity of mixed vegetables each year, as well as a considerable number of straight carloads of the leading market vegetables. The principal trucking sections are in the more southern group of parishes, more especially those bordering on the lower course of the Mississippi River. Prices have averaged fairly good this season and the industry is on a stable footing.

Generally speaking there is a tendency among farmers to plant more feed and forage crops, enough at least to satisfy their own needs along this line.

Livestock: There has been a developing tendency to improve the dairying industry in this State and considerable interest has been developed locally in dairying. A movement is on foot to secure the enactment of a state-wide tick eradication law which undoubtedly would be of great benefit to the livestock industry. The mild climate and year-round growing season for feed and forage plants, together with a good local market for dairy products would seem to justify the enactment of such a law. By far the largest portion of the dairy products consumed in this State is now brought in from outside areas.

General social conditions in the rural communities are improving. A recent bond issue is intended to pave the leading State highways, and a recent law provides for free textbooks for all children in the schools in this State.

LIONEL L. JANES.

NORTH CAROLINA

The past year has resulted in a depressing agricultural situation in North Carolina. Most of the so-called "cash" crops have cost more to produce than they sold for. The tax burdens have been particularly heavy on farmers.

The corn crop shows the lowest production for many years. This was due largely to the unfavorable August and September weather conditions, particularly the storms and floods. While corn has decidedly the largest acreage of crops, tobacco has proportionately an equally high value. With the acreage increased about 11 per cent, the total value of tobacco shows a decline of about 15 per cent from 1927. Cotton suffered severely from boll-weevil damages, resulting in one of the lowest yields per acre for many years. Peanuts, in which this State leads in production, also showed a poor yield, due to unfavorable weather conditions at the time of setting nuts.

The year was unusually favorable for the growth of hay crops and pastures. Along with the fact that livestock are showing an advantage in price indexes, the year has been favorable for this industry.

The fall season was favorable for the preparation and planting of small grains, as there was sufficient moisture to permit the breaking of the soil. The results of the past two years have been discouraging to the small grain farmer. Thus the opportunity for planting was not taken advantage of very extensively toward increasing the acreage.

Truck crops and peaches brought distressingly poor returns. With the advent of the good roads and motor trucks, only favorable prices are needed to result in an expansion of the commercial vegetable growing in the eastern counties of North Carolina. Large quantities of fresh perishables have been carried directly from the fields to the northern markets. Unfavorable prices, however, hampered the story that might be told concerning the advantage of motor transportation.

FRANK PARKER.

WEST VIRGINIA

The crop season of 1928 was marked by a spring two weeks later than usual, a crop acreage area slightly smaller than the preceding year, fruit production above the average, and crop yields 12.2 per

cent above the 10-year average due to favorable weather during the latter part of the season. Farm prices for crops of the State compared closely to those for the preceding year except those for fruits and potatoes, which are materially reduced, due to the large national supply of these products.

Based on the present analysis, the outlook for the coming year would point to a larger crop acreage, due to the fact that livestock production is showing increased profits which have resulted in increased numbers of farms making the demands for feed crops greater. Continued expansion is also expected in truck and small-fruit acreage due to high local prices.

The State's corn crop was planted about two or three weeks later than normal, but practically all of the area planted was harvested as there was a rather late fall and nearly all of the corn had matured before frosts occurred. There was an increase in area planted as well as increases in the yield per acre and farm price which resulted in a much higher total value for the crop than was had in 1927. The acreage planted is still materially lower than acreages prior to 1923 and expansion in acreage is likely to occur for the coming year due to the present high prices of corn and the increase in livestock numbers.

The abandonment of wheat planted for the 1928 harvest was the largest abandonment on record, as only 122,000 of the 135,000 acres planted remained for harvest. This decrease in area was followed by slightly lower yields than in 1927, largely caused by unevenstands on fields left for harvest, and as the farm price was identical with that for 1927 the value of the State's crop was materially lower than that of the preceding year.

Oats crop acreage was reduced due to unfavorable season at planting time. This was followed by the very ideal season for oats production, and yields were materially high which resulted in a total production higher than that for 1927. The farm price per bushel was just one cent lower than that for 1927, resulting in a higher total value than was had for the State's crop the previous year.

A slight increase was shown in acreage for the buckwheat crop, but yields were lower, and with no change in the farm price as compared to 1927, the total value this year was somewhat under that obtained for the 1927 crop.

Rye production was characterized by a reduction in acreage, slightly higher yields, higher farm prices, but a lower total value for the State due to the reduction in acreage.

There was a marked increase in the acreage of the tobacco crop due to the favorable price situation prevailing during planting time. Yields were under those of the preceding year but an increased production for the State resulted, due to the large increase in acreage. Farm prices were slightly under those of the preceding year, and the total value for the State was materially higher than the value of the 1927 crop.

The State's hay acreage was reduced in 1928 and with lower yields and slightly lower prices the value of the State's total crop was under that of 1927.

There was a material increase in potato acreage in the State due to commercial development in some areas, and the acreage this year is the largest on record. Yields were higher than those for 1927,

resulting in a record crop for the State, but the farm price was exceptionally low due to the large national supply, and the total value for the State was under that for 1927.

The season was very favorable for the production of apples and estimates show a material increase in the State's total crop but only a slight increase in the State's commercial crop. The slight increase in the State's commercial crop was due to the fact that a number of the commercial orchards had a heavy crop in 1927 when practically all of the farm apples were killed by late freezes. Quality of the commercial crop was materially lower than the preceding year, and the amount of fruit actually packed was probably under the amount that was packed the previous season. Prices for apples were low due to the large national supply which resulted in a much lower total value for the State's total crop.

The production of other fruits was very materially higher than the 1927 crops and, despite much lower prices, the total value for the State was over that for 1927. This increase in value for minor fruits was large enough to offset the decrease for apples and the State's total income from fruit production was higher than in 1927.

The livestock situation for the State during 1928 can be characterized by an increase in the number of cattle, sheep, and poultry, a slight decrease in horses and mules, and a material decrease in hogs. The increase in numbers of cattle and sheep is largely due to the building up of breeding herds caused by the favorable price situation. This increase started for cattle during the 1927 season and for sheep during the 1926 season and is expected to continue through the coming year.

The decrease in numbers of hogs is the result of lower prices, causing farmers to decrease the production of pigs. The number of old hogs now on farms is only slightly under the number a year ago, but the number of pigs on farms is materially under that of a year ago.

The decrease in the number of horses and mules is a continuation of the decrease which began in 1917. Some indications point to an increase in the number of colts being raised and this general decrease is not likely to be as great during the next few years.

A slight increase in poultry numbers for the State is the result of commercial development as well as increased production on general farms. The increased production on general farms has developed during the past few years due to low profits obtained from other sources, but, with more profitable cattle and sheep production, this increase was not so marked during the past year.

The price situation has improved during the past year for horses and mules, due to shortage of these animals, and for cattle and sheep, due to much higher market prices causing farmers to increase their herds. For hogs, it has decreased, due to lower market prices for hogs and high corn prices causing feeding operations to be unprofitable. For poultry, there have been only slight changes in prices this year as compared to last.

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